General

Guideline Title

Sleep disorders.

Bibliographic Source(s)

American Medical Directors Association (AMDA). Sleep disorders. Columbia (MD): American Medical Directors Association (AMDA); 2006. 38 p. [48 references]

Guideline Status

This is the current release of the guideline.

This guideline was reaffirmed for currency by the developer in 2011.

Recommendations

Major Recommendations

The algorithm Sleep Disorders in the Long-Term Care Setting is to be used in conjunction with the clinical practice guideline. The numbers next to the different components of the algorithm correspond with the steps in the text. Refer to the "Guideline Availability" field for information on obtaining the full text guideline.

Clinical Algorithm(s)

A clinical algorithm is provided for Sleep Disorders in the Long-Term Care Setting.

Scope

Disease/Condition(s)

Sleep disorders in the long-term care setting that are secondary to chronic medical conditions or environmental issues, including insomnia, hypersomnia, and parasomnias

Note: The management of primary sleep disorders (e.g., central or obstructive sleep apnea, restless legs syndrome, periodic limb movement during

sleep) in the long-term care setting is beyond the scope of this guideline.

Guideline Category

Diagnosis

Evaluation

Management

Prevention

Treatment

Clinical Specialty

Family Practice

Geriatrics

Internal Medicine

Sleep Medicine

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Nurses

Pharmacists

Physician Assistants

Physicians

Social Workers

Guideline Objective(s)

To improve the quality of care delivered to patients in long-term care settings
To offer care providers and practitioners in long-term care facilities a systematic approach to recognizing, assessing, treating, and monitoring patients with sleep disorders

Target Population

Elderly individuals and/or residents of long-term care facilities with sleep disorders

Interventions and Practices Considered

Recognition/Assessment

Obtaining medical and sleep history and evaluate signs and symptoms
Assessing risk factors for sleep disorder

Offering interim measures such as environmental adjustments and individualized comfort measures while assessment proceeds
Determining characteristics and possible causes of sleep disorder
Collecting information and making direct observations pertinent to the patient's sleep disorder
Assessing environmental, behavioral, and psychosocial factors that may be contributing to sleep disorders
Assessing medical conditions and medications that may be contributing to sleep disorder
Specialist evaluation, if indicated

Management/Treatment

Implementing nonpharmacologic interventions
Reconsidering medications that may be interfering with sleep
Treating the medical condition that is the underlying cause of sleep disorder
Prescribing medication in combination with nonpharmacologic therapy

Monitoring

Monitor the effectiveness of interventions
Maintaining or modifying interventions according to the patient's response to treatment
Monitoring the facility's management of sleep disorders

Major Outcomes Considered

Signs and symptoms indicating the presence of a sleep disorder
Use of medications
Quality of life
Side effects of sleep medications

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

2006 Guideline

Not stated

2011 Review Process

MEDLINE and PubMed were searched for updated literature related to the subject published between June 2009 and January 2011. This search is done annually and completed by the clinical practice committee vice-chair. If new literature does not change the content or scope of the original guideline, it is deemed to be current.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

This guideline was developed by an interdisciplinary workgroup, using a process that combined evidence and consensus-based approaches. Workgroups include practitioners and others involved in patient care in long-term care facilities. Beginning with a general guideline developed by an agency, association, or organization such as the Agency for Healthcare Research and Quality (AHRQ), pertinent articles and information, and a draft outline, each group works to make a concise, usable guideline that is tailored to the long-term care setting. Because scientific research in the long-term care population is limited, many recommendations are based on the expert opinion of practitioners in the field.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

Guideline revisions are completed under the direction of the Clinical Practice Guideline Steering Committee. The committee incorporates information published in peer-reviewed journals after the original guidelines appeared, as well as comments and recommendations not only from experts in the field addressed by the guideline but also from "hands-on" long-term care practitioners and staff.

All American Medical Directors Association (AMDA) clinical practice guidelines undergo external review. The draft guideline is sent to approximately 175+ reviewers. These reviewers include AMDA physician members and independent physicians, specialists, and organizations that are knowledgeable of the guideline topic and the long-term care setting.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

The guideline was developed by an interdisciplinary work group using a process that combined evidence- and consensus-based thinking.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Outcomes that may be expected from implementation of this clinical practice guideline include:

- Better awareness and understanding of sleep disorders among patients and caregivers
- Decreased long-term use of pharmacologic agents to promote sleep
- Decreased use of pharmacologic sleep agents that may be inappropriate in a frail, elderly population
- Greater acceptance of individualized scheduling (i.e., enabling patients to get up, go to bed, and eat meals at times of their choosing rather than at institutionally established times)
- Reduction in the frequency of daytime drowsiness, increased levels of participation in activities, improved social interaction, and enhanced quality of life for patients with sleep difficulties
- Improved physical and cognitive function and fewer falls
- Reduction in nighttime disruptive behavior caused by noise or bright lights
- Reduction in distressed daytime behavior in patients with dementia
- Decline in geriatric psychiatry referrals for evaluation of behavioral problems related to sleep disorders
- Increased participation in rehabilitation programs and better rehabilitation outcomes
- Increased job satisfaction among caregivers

Potential Harms

Adverse Effects of Medications

- The most frequent adverse effect of *eszopiclone* is an unpleasant taste.
- Continuous use of *benzodiazepine hypnotic agents* should be discouraged in the long-term care setting because of the risk of side effects, physiological tolerance, and adverse effects on discontinuation. Adverse events such as memory impairment, falls, excessive daytime sleepiness, and accidents occur more often at higher doses and with the use of long-acting agents. In addition, prolonged use of long-acting benzodiazepines can lead to cognitive impairment, incoordination, and worsening of depression. These agents are associated with anterograde amnesia, rebound insomnia, and residual daytime sedation, especially at high doses. These adverse effects generally appear to be worse in the elderly.
- Side effects of *tricyclic antidepressants* include anticholinergic effects and various degrees of suppression of rapid eye movement (REM) sleep.
- Potential side effects of *trazodone* include induction of cardiac arrhythmias (in patients with heart disease) and orthostatic hypotension.
- All *antidepressants* have potentially significant adverse effects, raising concerns about the risk-benefit ratio.
- Patients with renal and hepatic insufficiency may be at greater risk for side effects from *sedatives*.
- In patients with underlying obstructive sleep apnea, *hypnotics* can produce further nocturnal hypoxemia.
- The anticholinergic and sedative side effects of *tricyclic antidepressants* and *antihistamines* can increase cognitive deficits.
- *Antipsychotic medications* can cause orthostatic hypotension, possibly increasing the risk of falls.

Contraindications

Contraindications

Patients with severe liver disease should not take *ramelteon*.

Qualifying Statements

Qualifying Statements

This clinical practice guideline is provided for discussion and educational purposes only and should not be used or in any way relied upon without consultation with and supervision of a qualified physician based on the case history and medical condition of a particular patient. The American Medical Directors Association and the American Health Care Association, their heirs, executors, administrators, successors, and assigns hereby disclaim any and all liability for damages of whatever kind resulting from the use, negligent or otherwise, of this clinical practice guideline.
The utilization of the American Medical Director Association's Clinical Practice Guideline does not preclude compliance with State and Federal regulation as well as facility policies and procedures. They are not substitutes for the experience and judgment of clinicians and care-givers. The Clinical Practice Guidelines are not to be considered as standards of care but are developed to enhance the clinician's ability to practice.

Implementation of the Guideline

Description of Implementation Strategy

The implementation of this clinical practice guideline (CPG) is outlined in four phases. Each phase presents a series of steps, which should be carried out in the process of implementing the practices presented in this guideline. Each phase is summarized below.

Recognition
- Define the area of improvement and determine if there is a CPG available for the defined area. Then evaluate the pertinence and feasibility of implementing the CPG

Assessment
- Define the functions necessary for implementation and then educate and train staff. Assess and document performance and outcome indicators and then develop a system to measure outcomes

Implementation
- Identify and document how each step of the CPG will be carried out and develop an implementation timetable
- Identify individual responsible for each step of the CPG
- Identify support systems that impact the direct care
- Educate and train appropriate individuals in specific CPG implementation and then implement the CPG

Monitoring
- Evaluate performance based on relevant indicators and identify areas for improvement
- Evaluate the predefined performance measures and obtain and provide feedback

Implementation Tools

Audit Criteria/Indicators

Chart Documentation/Checklists/Forms

Clinical Algorithm

Resources

Tool Kits

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report

Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

American Medical Directors Association (AMDA). Sleep disorders. Columbia (MD): American Medical Directors Association (AMDA); 2006. 38 p. [48 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2006 (reaffirmed 2011)

Guideline Developer(s)

American Medical Directors Association - Professional Association

Guideline Developer Comment

Organizational participants included:

- American Association of Homes and Services for the Aging
- American College of Health Care Administrators
- American Geriatrics Society
- American Health Care Association
- American Society of Consultant Pharmacists
- National Association of Directors of Nursing Administration in Long-Term Care
- National Association of Geriatric Nursing Assistants
- National Conference of Gerontological Nurse Practitioners

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Guideline Committee

Steering Committee

Composition of Group That Authored the Guideline

Committee Members: Marjorie Berleth, MSHA, RNC, FADONA; Lisa Cantrell, RN, C; Charles Cefalu, MD, MS; Sandra Fitzler, RN; Joseph Gruber, RPh, FASCP, CGP; Susan M. Levy, MD, CMD; Harlan Martin, RPh., CCP, FASCP; Evvie F. Munley; Jonathan Musher, MD, CMD; Mary Tellis-Nayak RN, MSN; Barbara Resnick, PhD, CRNP; William Simonson, PharmD., FASCP

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

This guideline was reaffirmed for currency by the developer in 2011.

Guideline Availability

Electronic copies: None available

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: www.amda.com

Availability of Companion Documents

The following are available:

Guideline implementation: clinical practice guidelines. Columbia, MD: American Medical Directors Association, 1998, 28 p.
We care: implementing clinical practice guidelines tool kit. Columbia, MD: American Medical Directors Association, 2003

Electronic copies: None available

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: www.amda.com

Additionally, process and quality indicators, a sample sleep log, and sleep rating scales can be found in the tables and appendices in the original guideline document.

Patient Resources

None available

NGC Status

This summary was completed by ECRI on June 23, 2006. This summary was updated by ECRI Institute on April 30, 2007, following the FDA advisory on Sedative-hypnotic drug products. This summary was updated by ECRI Institute on November 9, 2007, following the U.S. Food and

Drug Administration advisory on Antidepressant drugs. This summary was updated by ECRI Institute on May 1, 2009 following the U.S. Food and Drug Administration advisory on antiepileptic drugs. The currency of the guideline was reaffirmed by the developer in 2011 and this summary was updated by ECRI Institute on May 11, 2012. This summary was updated by ECRI Institute on May 22, 2014 following the U.S. Food and Drug Administration advisory on Eszopiclone (Lunesta).

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